

36. *CUSCUTA REFLEXA* ROXB.—A RIVAL TO *DENDROPHTHOE FALCATA* (L.F.) ETTINGSH IN HOME GARDENS

Among the phanerogamic parasites, *Dendrophthoe falcata* Ettingsh has received considerable attention. *Cuscuta* belonging to N.O. Convolvulaceae is not so well known. The number of species of the genus *Cuscuta* has been reported as 7 (Hooker 1885), 5 (Gamble 1956 reprint) and 8 (Shareefuddin Khan 1951). Data on parasitism has been provided by Narayan 1956; Chavan & Sabnis 1960, and some contributions regarding its host range have also been made.

During 1971, 1972 due to unknown factors *Cuscuta reflexa* Roxb. suddenly started spreading in the Deccan from Hyderabad to Bangalore showing itself as yellowish green, leafless, tendril like growth having a coverage and spread. This alarmed orchard and garden owners. Frequently *Cuscuta reflexa* has been confused with *Cassytha* Linn. species belonging to N.O. Lauraceae which is also a complete flowering parasite. The two species however can be easily differentiated from each other. The stem tendrils of *Cassytha* are smaller in diameter, dark green to rusty orange, not easily breakable (fibrous), and overall, the parasite is not as much conspicuous as *Cuscuta*. *Cuscuta reflexa*, on the other hand, is light yellowish (or greenish yellow) to orange, more succulent and easily breakable, very conspicuous and may completely cover the host plant. Frequently the vines turn self parasitic on other branches of the parasite *Cuscuta* or on the same branch itself. As regards the flowers and fruits, the flowers of *Cassytha* are yellow to cream coloured, the fruit is glabrous, upto the size of a pea enclosed in a succulent perianth tube, and crowned by its limb, with a mono-carpellary ovary. The flowers of *Cuscuta reflexa* are white in cymose or paniculate clusters, shortly pediculate, capsules globose to conical, apiculate, seeds 1-2. It also appears that *Cassytha* is more common on wild plants than on garden plants.

Several attempts at citing the host range of *Cuscuta reflexa* have been made by earlier workers and Kaushik (1970) has mentioned that there are 90 different hosts of this parasite belonging to Angiosperms, Gymnosperms and Pteridophytes. In addition, he added 14 new hosts to the host range. When compared to the host range of *Dendrophthoe falcata* which is nearly 330, this figure appears very small indeed. Probably clear distinction between *Cassytha* and *Cuscuta* and more elaborate search of hosts might bring in many more unknown hosts.

During 1971 and 1972 when the appearance of *C. reflexa* became so prolific in the cities of Hyderabad and Bangalore we came across several hosts, among which, as far as is known to us, the following 18 are new host records. Out of these, 13 are plants which are usually grown and maintained in home gardens and one is cultivated for oil

extraction (*Ricinus communis*).

TABLE

No.	Host species	Natural order	Degree of infestation
1.	<i>Aristolochia bractata</i> Retz.	Aristolochiaceae	Light
2.	<i>Argyrea speciosa</i> Sw.	Convolvulaceae	Light
3.	<i>Bougainvillea spectabilis</i> Willd.	Nyctaginaceae	Very heavy
4.	<i>Casurina equisetifolia</i> L.	Casurinaceae	Very heavy
5.	<i>Citrus decumana</i> L.	Rutaceae	Medium
6.	<i>Citrus medica</i> L. var. <i>acida</i>	Rutaceae	Medium
7.	<i>Cryptostegia grandiflora</i> R. Br.	Asclepiadaceae	Medium
8.	<i>Diospyros melanoxylon</i> Roxb.	Ebenaceae	Medium
9.	<i>Duranta plumieri</i> Jacq.	Verbenaceae	Heavy
10.	<i>Ervatamia divaricata</i> (L.) Burkill (Syn. <i>Taberina- montana coronaria</i> R. Br.)	Apocynaceae	Medium
11.	<i>Grewia subinaequalis</i> DC.	Teliaceae	Medium
12.	<i>Jasminum grandiflorum</i> L.	Oleaceae	Very heavy
13.	<i>Leptadinia reticulata</i> W.A.	Asclepiadaceae	Very heavy
14.	<i>Millingtonia hortensis</i> Linn.	Bignoniaceae	Very heavy
15.	<i>Ormocarpum sennoides</i> DC.	Leguminosae	Heavy
16.	<i>Ricinus communis</i> L.	Euphorbiaceae	Medium
17.	<i>Thevetia neriifolia</i> Juss.	Apocynaceae	Very heavy
18.	<i>Zizyphus oenoplia</i> Thuill	Rhamnaceae	Light

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